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**Notice of Allowability**

Application No.

10/800,687

Applicant(s)

SHIGETA ET AL.

Examiner

Hoang Ngo

Art Unit

2852

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to \_\_\_\_\_.
2. ☒ The allowed claim(s) is/are 1-11.
3. ☒ The drawings filed on 16 March 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

## **DETAILED ACTION**

### ***Allowable Subject Matter***

1. Claims 1-11 are allowed.
2. The following is an examiner's statement of reasons for allowance: None of the prior art of record teaches an image forming apparatus having a developing device comprising a rotary developer carrier facing a latent image carrier for carrying a developer comprising a toner and a carrier; a rotary developer supply and collection member for supplying the developer to and collecting from the developer carrier; a first rotary developer stirring member for stirring the developer while conveying and circulating the developer; a second rotary developer stirring member for stirring the developer while conveying and circulating the developer between the first and second developer stirring members, wherein the developer carrier, the developer supply and collection member, the first developer stirring member and the second developer stirring member are arranged in a housing in parallel with each other order in a direction leaving the latent image carrier, and wherein conveyance directions of the developer of the first and second developer stirring members are opposite to each other with respect to rotary axis directions thereof, and conveyance power for the developer thereof substantially identical to each other; a third rotary developer stirring member for stirring the developer, having a length in a rotary axis direction smaller than that of the second developer stirring member and a conveyance power for the developer in a rotary the second developer stirring axis direction that is substantially zero, provided facing the second developer stirring member at a position corresponding to an upstream portion of

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and farther than the second developer stirring member in the housing; and a toner replenishment inlet through which a new replenished, provided in the housing at an upper toner position of a part where circumferential surfaces of the second and third developer stirring members face each other, and on an upstream side developer of the second developer stirring member, wherein the third developer stirring member rotated so that the circumferential surface thereof moves downward in the same direction as that of the circumferential surface the second developer stirring member at the position where the circumferential surfaces of the second and third the conveyance direction of the developer stirring members face each other.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Inquiry***

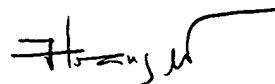
3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kikuta et al, Sato, Sugimoto, and Sakai et al, disclose other structures of a developing device used in image forming apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang Ngo whose telephone number is (571) 272-2138. The examiner can normally be reached on 6:00am - 2:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Hoang Ngo  
Primary Examiner  
Art Unit 2852

Hn  
June 21, 2005